Top Scoret "U"

Tidom/1-30

Report on Interrogation of Uffz. KARRENBERG at Steeple Claydon on 7th July, 1945 at 1100 a.m.

Present: Lt.Col. PRITCHARD
Major BUNDY
Lt. J. EACHUS

F.P. PICKERING

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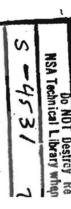
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2.

The subject of this interrogation was confined to Karrenberg's work on Russian Baildot letter "strip", traffic known to the Germans as "BANDWUR!" and not to be confused with Russian 5 letter traffic also carried on Baudot lines.

The Germans had not captured any of the apparatus used but considered that it consisted of two parts: 1) a Baudot teleprinter with the letters of the Russian alphabet (excluding q and 5) and figure and letter shift making 32 characters in all; 2) a cipher attachment consisting of 5 small wheels driven by one large wheel.

Each of the small wheels had a pattern of positive and negative impulses and each wheel worked in conjunction with one of the five impulses produced by pressing a key of the teleprinter, the effect being to add a positive or negative impulse to each of the five impulses produced by the letter being sent. This in effect means adding a letter of key to the clear letter to produce a cipher letter.

Depths were frequent on the traffic intercepted by the Germans, but they do not seem to have made any attempt to reconstruct the wheel patterns. In the case of the driving wheel they came to the tentative conclusion that it had a period of 43. The preambles of messages were always enciphered which resulted in stereotyped and known beginnings to messages.

The machine setting for a message was indicated by means of a two figure number which presumably referred to a table of settings; a different table was used each day.

Before the actual start of a message a passage of operator's chat was sent enciphered by the addition of a constant letter to each letter of the clear text. This letter was then sent en clair and repeated three times. The object of this was to see that the receiver had his machine set up correctly.

The system is used by the Army and Air Force and to a lesser extent by the N.K.W.D.